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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/217,266 12/21/98 DARAISEH

A 22171.94 (RR-

EXAMINER

WM01/0710

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ART UNIT

PAPER NUMBER

2661

DATE MAILED:

07/10/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/217,266

Applicant(s)

DARAISEH ET AL.

Examiner

Tri H. Phan

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claims ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Danne et al.** (U.S.5,761,619) in view of **Baldwin et al.** (U.S.5,633,868).

In regard to claim 1, **Danne** teaches:

a cellular telecommunications system having a multi-level distributed architecture (Fig. 3) comprises:

“a plurality of base station transceiver subsystems (203, Fig.3; See Col. 9, Lines 4-12) arrange across a plurality of cells (Fig.3; See Col. 9, Lines 22-27), each base station transceiver subsystem (BTS) has a capability for establishing a radio frequency interface with a subscriber unit in conjunction with a telephone call” (Fig.3; See Col. 9, Lines 62-67 and Col. 10, Lines 1-24);

“first level PSEL” (211, Fig.3; See Col. 9, Lines 4-9) means for implementing compressed packet data in conjunction with the telephone call, each “first level PSEL” being coupled to and positioned proximate a prescribed plurality of “base station transceiver subsystems” (Fig.3; See Col.9, Lines 33-37 and Lines 62-67; Col. 10, Lines 1-24);

“second level PSEL” (211”, Fig.3; See Col. 9, Lines 4-9) is coupled to at least one “first level PSEL” (Fig.3; See Col.9, Lines 37-46);

“router” (211’, Fig.3; See Col. 9, Lines 4-9) is coupled to “second level PSEL” for routing compressed packet data to and from “first level PSEL through second level PSEL”;

“CSEL” (211’”, Fig.3; See Col. 9, Lines 4-9) is coupled between “router” and a “prescribed mobile switching center” (105, Fig.3; See Col. 9, Lines 51-55), wherein “router is further for routing compressed packet data to and from at least one CSEL” (Fig.3; See Col. 9, Lines 33-40).

Danne does not teach “power control” and “frame selection” for “first and second level PSEL”, “call processing” and “call management” for “CSEL”.

Baldwin teaches “frame selection” (Fig.3; See Col 9, Lines 24-28), “power control” (Fig.3; See Col 8, Lines 54-56 and Col 16, Lines 53-63), “call processing” (Fig.3; See Col 13, Lines 2-19) and “call management” (Fig.3; See Col 12, Lines 45-68) in the Virtual Circuit Management in Cellular Telecommunications.

Danne discloses “PSEL” and “CSEL” in the Distributed Telecommunications System with exception of functions as “power control”, “frame selection”, “call processing” and “call management”. **Baldwin** discloses functions as “power control”, “frame selection”, “call processing” and “call management” for improving the switching and service control function in the Virtual Circuit Cellular Telecommunications.

Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention was made to add “call processing” and “call management” functions to “CSEL” as taught by **Baldwin**, “power control” and “frame selection”

functions as taught by **Baldwin** to “first and second level PSEL” in the Distributed Telecommunications System as taught by **Danne**.

The motivation for adding “call processing”, “call management”, “power control” and “frame selection” methods to the Distributed Telecommunications System as taught by **Danne** being that it provides greater capacity of transport line and improves service control, thus reduces a system operating cost and network blocking.

In regard to claim 2, **Danne** teaches:

“a plurality of first level PSEL” (local handoff, Fig.3; See Col.9, Lines 4-9 and Lines 33-37) is coupled to “a plurality of base station transceiver subsystems” (203, Fig.3; See Col. 9, Lines 4-12 and Lines 62-67; Col. 10, Lines 1-24) and to “second level PSEL” (local handoff 211”, Fig.3; See Col. 9, Lines 4-9) where:

“second level PSEL operates in either of two modes, i) a first mode including a pass-through mode wherein frame selection is performed by a first level PSEL and ii) a second mode, wherein a particular movement of the subscriber unit gives rise to the occurrence of a soft handoff between BTSs of different first level PSELs and second level PSEL operates to handles the soft handoff while placing respective first level PSELs in a pass-through mode” (Fig. 3; See Lines 33-46).

Danne does not teach “power control” and “frame selection” for “first and second level PSEL”

Baldwin teaches “power control” (Fig.3; See Col 8, Lines 54-56 and Col 16, Lines 53-63) and “frame selection” (Fig.3; See Col 9, Lines 24-28) in the Virtual Circuit Management in Cellular Telecommunications.

Danne discloses “first and second level PSEL” in the Distributed Telecommunications System with exception of functions as “power control” and “frame selection”. **Baldwin** discloses functions as “power control” and “frame selection” for improving the switching and service control function in the Virtual Circuit Cellular Telecommunications.

Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention was made to add “power control” and “frame selection” functions as taught by **Baldwin** to “first and second level PSEL” in the Distributed Telecommunications System as taught by **Danne**.

The motivation for adding “power control” and “frame selection” functions to the Distributed Telecommunications System as taught by **Danne** being that it provides greater capacity of transport line, thus reduces a system network blocking.

In regard to claim 3, **Danne** teaches:

“router” (local handoff 211', Fig.3; See Col. 9, Lines 4-9) is coupled to “CSEL” (local handoff 211”, Fig.3; See Col. 9, Lines 4-9) via network means, which are preferably an optical fiber cable (network means, Fig. 2; See Col. 7, Lines 4-6).

Furthermore, **Danne** teaches the network means can be substituted by other transmission mediums (network means, Fig. 2; See Col. 8, Lines 50-56) in the Distributed Telecommunications System.

Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention was made to select one of the group consisting of T1, E1, satellite, fiber optic, a public network, a router, and a mobile switching center.

In regard to claim 4, **Danne** teaches:

“CSEL” is coupled to “MSC” (MSC, Fig. 2; See Col. 9, Lines 51-59) via “a plurality of digital signal processors” (209, Fig. 2; See Col. 9, Lines 4-9 and Col. 10, Lines 13-16, 40-47), wherein a prescribed selected frame selected by “first level PSEL, second level PSEL, and router” (Fig. 2; See Col. 9, Lines 32-47).

Claims 5-8 are rejected for the same reason as in claim 3.

In regard to claim 9, **Danne** teach:

a cellular telecommunications system having a multi-level distributed architecture (Fig. 3) comprises:

“a plurality of base station transceiver subsystems” (203, Fig.3; See Col. 9, Lines 4-12) arrange across “a plurality of cells” (Fig.3; See Col. 9, Lines 22-27), “each base station transceiver subsystem (BTS) has a capability for establishing a radio frequency interface with a subscriber unit in conjunction with a telephone call” (Fig.3; See Col. 9, Lines 62-67 and Col. 10, Lines 1-24);

“PSEL” (local handoff 211, Fig.3; See Col. 9, Lines 4-9) means for implementing compressed packet data in conjunction with the telephone call, “each PSEL being coupled to and positioned proximate a prescribed plurality of base station transceiver subsystems” (Fig.3; See Col.9, Lines 33-37 and Lines 62-67; Col. 10, Lines 1-24);

“router” (local handoff 211', Fig.3; See Col. 9, Lines 4-9) is coupled to “PSEL” for routing compressed packet data to and from “PSEL”;

“CSEL” (local handoff 211", Fig.3; See Col. 9, Lines 4-9) is coupled between “router” and “a prescribed mobile switching center” (MSC, Fig.3; See Col. 9, Lines 51-55), “wherein router is further for routing compressed packet data to and from at least one CSEL” (Fig.3; See Col. 9, Lines 33-40).

Danne does not teach “power control” and “frame selection” for “PSEL”, “call processing” and “call management” for “CSEL”.

Baldwin teaches “frame selection” (Fig.3; See Col 9, Lines 24-28), “power control” (Fig.3; See Col 8, Lines 54-56 and Col 16, Lines 53-63), “call processing” (Fig.3; See Col 13, Lines 2-19) and “call management” (Fig.3; See Col 12, Lines 45-68) in the Virtual Circuit Management in Cellular Telecommunications.

Danne discloses “*PSEL*” and “*CSEL*” in the Distributed Telecommunications System with exception of functions as “power control”, “frame selection”, “call processing” and “call management”. **Baldwin** discloses functions as “power control”, “frame selection”, “call processing” and “call management” for improving the switching and service control function in the Virtual Circuit Cellular Telecommunications.

Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention was made to add the “call processing”, “call management” functions as taught by **Baldwin** to “*CSEL*” and “power control”, “frame selection” functions as taught by **Baldwin** to “*PSEL*” in the Distributed Telecommunications System as taught by **Danne**.

The motivation for adding “call processing”, “call management”, “power control” and “frame selection” functions to the Distributed Telecommunications System as taught by **Danne** being that it provides greater capacity of transport line and improves service control, thus reduces a system operating cost and network blocking.

In regard to claim 10, **Danne** teach:

“PSEL includes at least one first level PSEL” (local handoff 211, Fig.3; See Col. 9, Lines 4-9) “which being coupled to and positioned proximate a prescribed plurality of base station transceiver subsystems” (Fig.3; See Col.9, Lines 33-37 and Lines 62-67; Col. 10, Lines 1-24), where system further comprising:

“second level PSEL” (local handoff 211”, Fig.3; See Col. 9, Lines 4-9) is coupled to at least one first level PSEL and operates to handles the soft handoff and places the respective first level PSELs in a pass-through mode, further wherein router routes compressed packet data to and from the at least one first level PSEL through said second level PSEL” (Fig. 3; See Col. 9, Lines 33-46).

Danne does not teach “power control” and “frame selection” for “first and second level PSEL”

Baldwin teaches “power control” (Fig.3; See Col 8, Lines 54-56 and Col 16, Lines 53-63) and “frame selection” (Fig.3; See Col 9, Lines 24-28) in the Virtual Circuit Management in Cellular Telecommunications.

Danne discloses “first and second level PSEL” in the Distributed Telecommunications System with exception of functions as “power control” and “frame selection”. **Baldwin** discloses functions as “power control” and “frame selection” for

improving the switching and service control function in the Virtual Circuit Cellular Telecommunications.

Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention was made to add “power control” and “frame selection” functions as taught by **Baldwin** to “first and second level PSEL” in the Distributed Telecommunications System as taught by **Danne**.

The motivation for adding “power control” and “frame selection” functions to the Distributed Telecommunications System as taught by **Danne** being that it provides greater capacity of transport line, thus reduces a system network blocking.

In regard to claim 11-14, **Danne** teaches:

“PSEL” (local handoff 211, Fig.3; See Col. 9, Lines 4-9) is coupled to “router” (local handoff 211', Fig.3; See Col. 9, Lines 4-9) via network means, which are preferably an optical fiber cable (network means, Fig. 2; See Col. 7, Lines 4-6).

Furthermore, **Danne** teaches the network means can be substituted by other transmission mediums (network means, Fig. 2; See Col. 8, Lines 50-56) in the Distributed Telecommunications System.

Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention was made to select one of the group consisting of T1, E1, and satellite.

In regard to claim 15, **Danne** teaches:

“router is coupled to CSEL” where fiber optic is preferably used as physical medium for data transmission.

Furthermore, **Danne** teaches the physical medium can be substituted by other transmission mediums (network means, Fig. 2; See Col. 8, Lines 50-56) in the Distributed Telecommunications System.

Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention was made to select one of the group consisting of T1 line, E1 line, satellite link, fiber optic link, a public network, router, and switch.

In regard to claim 16, **Danne** teaches:

“CSEL” is coupled to “MSC” (MSC, Fig. 2; See Col. 9, Lines 51-59) via “a plurality of digital signal processors” (209, Fig. 2; See Col. 9, Lines 4-9 and Col. 10, Lines 13-16, 40-47), “wherein a prescribed selected frame selected by PSEL, router” (Fig. 2; See Col. 9, Lines 32-47).

As to claims 17-21, it is rejected for the same reason to rejection claims 1-8, since claims 17-21 is merely the method for establishing the system in claims 1-8.

As to claims 22-26, it is rejected for the same reason to rejection claims 9-16, since claims 22-26 is merely the method for implementing the system in claim 9-16.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Menon et al. (U.S.6,208,627), **Beven** (U.S.6,167,036), and **Spartz et al.** (U.S.6,178,337) are all cited to show a method using functions as power control, frame selection, call processing, call management and apparatus for operating a satellite based or a point to point wireless telecommunication system utilizing code division multiple access where BTSs are coupled to BSC via wire based links (T1 or E1) or other connections may be substituted including the use of microwave link (See Col. 9, Lines 55-58) which are considered pertinent to the claimed invention.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tri H. Phan whose telephone number is (703) 305-7444. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas W. Olms can be reached on (703) 305-4703. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-1985 for regular communications and (703) 305-1985 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

TP.

Tri H. Phan
June 27, 2001

Douglas W. Olms
DOUGLAS OLMS
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